

Installation Instructions for REC02U & REC03U w/ GPS HD 4-CH Dual SD Card Hybrid HD MDVR Distributed by Verity.



Please read this manual completely before operating the SYSTEM



Component Solution Services, LLC. 56600 Twin Branch Dr., Mishawaka, IN 46545 www.veritysafe.com

Contents

ABOUT US	3
THINK SAFETY FIRST	
Components	6
Power Cable	6
Placement	
VIDEO TIGGERS	8
Front Video Audio Out	
OPTIONAL: ADD02CP	9
Connecting Harnesses	10
Metal Connector Tamper-resistant Cover	11
WARRANTY	15

IMPORTANT NOTICE:

There have been many recent changes to electrical harnesses in commercial vehicles. CAN bus signal transmission can cause faint ghosting on DVR recording, monitors, and even in some cases, audio devices. We have designed technologies to prevent this issue in the DVR. It is recommended to follow the chassis manufacturer's wiring suggestions. These can be found by searching the chassis manufacturer's up-fitter guidelines. Use the designated grounding post. For a professional installation, a simple black and red wire search under the dashboard may not work.

ABOUT US



Verity does not just buy systems off the shelf overseas, put our logo on them, and ship them out. We work with engineers, some at our location in Mishawaka, Indiana to design camera systems to meet the safety needs of several industries.

Where some companies just fall for the latest trend and bring untested safety equipment to the market, we perform the needed testing and often help factories make a better product for which we employ the ODM (original design manufacturing) method. We employ global engineers who help us offer the latest technologies.

One aspect of every project we do is: "How will we defend it in court?" By doing extensive testing, we know our products are the best. We make our products



THINK SAFETY FIRST

Verity products are intended to be installed as a supplement, and our observation systems and/or products are not intended to be a substitute for mirrors or other standard motor vehicle equipment which may be required by law. Verity products promote improving vehicle/driver operations. Our products are no substitute for proper driving techniques, observance of traffic laws, and motor vehicle safety regulations.

Installation Location

Before installing the MDVR, be sure you are not drilling into any objects, such as wires, vents, airbags, etc., when drilling the mounting holes. If not using the optional ADD02CP IR extender, the MDVR face plate must be installed in straight line sight of the remote.

DO NOT OPEN ANY COMPONENT. There are no serviceable parts inside any Verity product. Opening the product will break the tamper indicators and void the warranty. If a problem should arise, please contact our technical support at 574-807-6004. For faster resolution, fill out a service ticket found on our website.





WARNING

- Do not pull cables tightly and add tension to them. A drip loop is required where applicable.
- Do not place cables where they can be crushed in any manner.

CAUTION

- To avoid damage to the electronic circuit, stop using this product while doing welding work to the vehicle and/or trailers.
- When cleaning monitors, cameras, and DVRs, use a damp, lint-free cloth only.
- Connect this unit only to other compatible Verity components.
- Although our products have built-in surge and cross-polarity protection, ensure all cables are connected properly. Improper cable connections may damage the DVR.
- Cables should not be allowed to touch hot or rotating parts, such as the engine or exhaust.
- Do not locate the DVR near heatgenerating vents or devices.
- Turn off power to the DVR when connecting the camera(s).

COMPONENTS

DVR Back Plate

Dimensions

170 x 142 x 50mm Including security cover 170 x187 x 50mm

Power Cable

GND Ground	DC IN+ Power Wire	ACC Ignition Hot
1	+	00



GND | Ground wire needs to go to a chassis ground post or proper grounding location suggested by the truck OEM. **DC IN+ | 12v. Power Wire.** This wire needs to be connected to constant power. The DVR can be set to run past the ignition being turned off. (See the operation manual to find directions on how to set this option.)

ACC wire is an ignition hot wire. This is used to activate recording.

Placement

The remote is an IR remote and the DVR needs to be in straight line sight of the DVR.



If you install the DVR behind a wall or in a cabinet, the IR remote will not work.



For these applications, our IR extender will allow you to place the DVR hidden behind a wall and use our ADD02CP. This IR/LED panel has a 16-foot extended cable. This panel provides feedback on the operation of the DVR. Never miss another recording due to issues that may occur over the years.



VIDEO | TIGGERS



Video | Audio Out

Camera Trigger

Wires Option

Trigger Wires

Yellow 4-Pin: Connect to monitor

Camera trigger:

Needed triggers are tagged

Option Trigger Wires:

These will be tagged to match added options.



Front Video | Audio Out



OPTIONAL: ADD02CP

If our LED Control Panel & IR Extender is added, there is a connector on the trigger wires.



Once the ADD02CP has been installed, program the DVR to accept it.











PWR: Power light indicates when MDVR has power.

REC: Recording light indicates recording is functional. **HDD:** Hard Disk Light indicates Hard Disk is functional

(This does not apply to DVRs that use SD cards.)

ALM: The alarm light indicates the following alarms: IO

Linkage Alarm, Speed Alarm, G-sensor Alarm,

Temperature Alarm, and HDD Error Alarm.

V-LOSS: Video lost light.

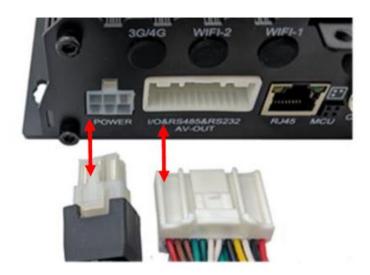
ERP: Error light indicates functioning errors. **IR:** Sensor for the MDVR Remote Control.

To access, use the following:

The Baud rate needs to point to "Panel."



Connecting Harnesses



Connecting Cameras

Connect camera to the corresponding camera IN.



Metal Connector Tamper-resistant Cover

Security cover helps prevent tampering or damage to the cable connection on the back of the MDVR.







REC03U DVR with Optional GPS

The installation of the REC03U has one added step. The GPS antenna needs to be installed.

REC03U with GPS







Antenna Location

The location of antenna is key to successful operations.

Although, many say the "magnetic style" GPS antennas, which are the industry standard are waterproof, they are not truly waterproof in many ways. Most are only IP65 rated.

FYI: IP65 (waterproof rating) is tested at 4 psi of water pressure. Hard rain may fall at pressures of 5-7 PSI. Drive-through vehicle wash facilities use approx. 1500 psi. It is recommended to use an antenna rated for external use.

We do include the magnetic-style antenna as standard with our systems. Most often, the antenna can simply be mounted on the truck's dashboard, near the base of the windshield. This location allows the antenna clear and unobstructed access to the sky. Most windshield glass should not significantly hinder reception from GPS satellites.

However, a small percent of chassis the OEMs are using have glass with coatings which may inhibit the signal.

Acceptable GPS Signal





When Do I Need an External GPS Antenna?

When the windshield angle prevents an upward or outward path to the satellite in the sky, some bullet proof/protective glass may also impede signals.

WARRANTY

Verity®

A division of COMPONENT SOLUTION SERVICES (CSS) LIMITED ONE (1) YEAR WARRANTY

CSS products' warranties are not transferable. The warranties apply to the retail consumer for one (1) year and covers against defects in material and workmanship on Verity systems. We do not warranty our cables, which are QC tested at three different stations before shipping. All components must be installed in compliance with all Federal, State, and Local government requirements. Warranty is limited to the United States of America and Canada.

Defective components will be replaced or repaired, based on a CSS evaluation of the component. In-bound shipping charges, based on the CSS rate allocated in the RMA (returned merchandise agreement), will be covered once the component has been deemed defective at the CSS warranty facility. The pre-assigned in-bound freight will be supplied upon return of product. All repaired/replaced warranty parts shall be for the remaining duration of the original warranty time period.

CSS takes pride in our products and will aid in the processing of your components:

- a) All warranty claimants must have consulted our technical support department for trouble shooting and the acquiring of an RMA. Contact can be made via email at tech@verityrvs.com or call 574-807-6002.
- b) When the warranty claim is made, the consumer must establish the warranty start dates by presenting documentation regarding the date of retail purchase (e.g., bill of sale).
- c) Service performed by non-authorized service personnel may void all warranty claims.
- d) CSS will make no payments for system removal / system re-installing, mileage allowance, or transportation expenses.

The limited warranty does not cover damage resulting from misuse, accident, modification or alteration to hardware or software, tampering, unsuitable physical or operating environment beyond product specifications, improper maintenance, or failure caused by a product for which CSS is not responsible. There is no warranty for any product with removed or altered identification labels. CSS DOES NOT PROVIDE ANY OTHER WARRANTIES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OF IMPLIED

WARRANTIES, SO THIS LIMITATION MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

Technical Support

A service ticket can be filled out online to supply the quickest service. The service ticket can be easily found on our website www.verityrvs.com or use the code to the right. Please have the serial number, which is found on the top of the DVR, when contacting the service department. We take great pride in delivering the most dependable product in the industry. Each item was 100% QC

Tested, and then we randomly recheck another up to 10% before it leaves our hands to you. We have a .034% issue rate with this product.

Email Tech Support: Tech@verityrvs.com

Phone Tech Support: 574-807-6004



Note: if you are an OEM, Fleet fire/rescue customer needing tech support after hours or on weekends, leave a message, and a technician will return your call as soon as one becomes available.



a division of

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We at Verity would like to personally thank you for purchasing our product. Our company strives to supply the best products at a fair price. We care that you enjoy a safe driving experience.